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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/687,258	10/16/2003	Julianne Frances Haugh	AUS920030712US1	9976
35525	7590	05/31/2007		
IBM CORP (YA) C/O YEE & ASSOCIATES PC P.O. BOX 802333 DALLAS, TX 75380			EXAMINER TO, BAOTRAN N	
			ART UNIT 2135	PAPER NUMBER
			MAIL DATE 05/31/2007	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	Application No. 10/687,258	Applicant(s) HAUGH ET AL.	
	Examiner Bao Tran N. To	Art Unit 2135	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 14 March 2007.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                 | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date: _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                        | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date: _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Docketing***

1. Please note that the application has been re-docketed to a different examiner. Please refer all future communications regarding this application to the examiner of record using the information supplied in the final section of the Office action.

This Office action is responsive to the Applicant's Amendment filed 03/14/2007.

Claims 1, 11 and 20 are amended.

Claims 1-20 are pending in the application.

### ***Response to Arguments***

2. Applicant's arguments with respect to claims 1, 11, 20 have been considered but are moot in view of the new ground(s) of rejection with Bradley et al. (U. S. Patent No. 6,651,096) hereinafter Bradley.

Applicant argues, "Gai also fails to teach the steps for associating two or more access control lists with a given files system object" (Page 4 of Remarks).

Examiner respectfully disagrees with this argument. Gai explicitly discloses, "First, a network administrator creates one or more access control lists in a conventional manner. For example, the administrator preferably utilizes a conventional text editor at a management station (not shown) to create the access control lists. FIGS. 5A-5E are highly schematic representations of text-based ACLs 416a-416e, respectively. Each access control list, such as ACL 416a, is given a name, such as

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ACL 101, and is preferably arranged in a table array having multiple rows and columns. Each row of the ACL, such as ACL 416a, corresponds to an Access Control Entry (ACE) statement, such as ACE statements 502-514, which specify the various criteria for the ACL 416a. The columns of the ACL represent the specific criteria with which network messages are compared. For example, ACLs 416a-416d each include a separate column for source address 516, destination address 518, source port 520, destination port 522 and protocol 524. Those skilled in the art will understand that greater or fewer message criteria may be employed. In addition, each ACL includes an action column 526 that corresponds to the particular action that is to be applied to network messages matching a corresponding ACE statement. In the preferred embodiment, permissible actions include permit, deny, permit and log, and deny and log" (col. 7, lines 15-39).

Furthermore, Gai discloses, "Those skilled in the art will understand that other actions may be specified. For example, a possible action may be to execute a particular program stored in the non-volatile or dynamic memory of the device. That is, the action of a first ACE may be to execute application "abc", while the action of a second ACE is to execute application "xyz". Another possible action is to return a tag to be concatenated with other fields of the message (e.g., fields other than those used for comparison with the first ACL) and compare this concatenated tag and the other fields with the ACEs of a second ACL. This may be useful for determining patterns that exceed the size of the associative memory or TCAM 410" (col. 40-51). Therefore, Gai's reference is maintained.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-3, 8,10-13,18 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gai et al. (U. S. Patent No. 6,651,096) hereinafter Gai in view of Bradley et al. (U. S. Patent No. 6,651,096) hereinafter Bradley.

Regarding Claims 1 and 20, Gai discloses a method for managing access control lists in a filesystem (see abstract, "organizing, storing and evaluating access control lists"), the method comprising:

associating two or more access control lists (see Fig. 4, elements 416a-416e) with a given filesystem object, (see col. 7 lines 15-51);

Gai does not disclose "in a heterogeneous filesystem, wherein the heterogeneous filesystem comprises two or more differing types of filesystems."

However, Bradley explicitly discloses in a heterogeneous filesystem, wherein the heterogeneous filesystem comprises two or more differing types of filesystems (Abstract, col. 7, lines 30-40 and col. 18, lines 1-24).

Therefore, it would have been obvious at the time the invention was made to a person having ordinary skill in the art to have incorporated Bradley's invention within Gai to include in a heterogeneous filesystem, wherein the heterogeneous filesystem comprises two or more differing types of filesystems. One of ordinary skill in the art would have been motivated to do this because there is a need for a file system that can efficiently grant access to heterogeneous platform (Bradley col. 3, lines 9-10).

Gai and Bradley disclose the limitations of Claims 1 and 20 above. Gai and Bradley further disclose responsive to receiving, from a requester, a request for an access control list associated with the given filesystem object (Gai see col. 4, lines 26-32; col. 7, lines 24-32), determining a filesystem type of the requester (Gai see col. 5, lines 13-21; col. 7, lines 29-34; col. 8, lines 9-15); and

returning an access control list from the two or more access control list for the given filesystem object matching the filesystem type of the requestor (see Gai col. 8, lines 14-15, "Once a match is located, the corresponding action is returned and processing stops") and (see Bradley Figures 7 and 9, col. 18, lines 1-25).

Regarding Claims 2 and 12, Gai and Bradley disclose the limitations of Claims 1 and 20 above. Gai further discloses determining whether an access control list matching the filesystem type of the requester exists (see col. 5, lines 13-21; col. 7, lines 29-34; col. 8, lines 9-15); and responsive to a determination that a matching access control list exists, returning the matching access control list (see col. 8, lines 14-15, "Once a match is located, the corresponding action is returned and processing stops").

Regarding Claims 3 and 13, Gai and Bradley disclose the limitations of Claims 1 and 20 above. Gai further discloses wherein the step of returning the matching access control list (see col. 8, lines 14-15, "Once a match is located, the corresponding action is returned and processing stops") includes accessing the matching access control list using an access mechanism (see col. 7, lines 24-27, ACE-Access Control Entry) associated with the filesystem type of the requester (see col. 5, lines 13-21; col. 7, lines 29-34; col. 8, lines 9-18). Examiner notes the protocol field in the ACE is associated with the filesystem type of the requester and is used for access.

Regarding Claims 8 and 18, Gai and Bradley disclose the limitations of Claims 1 and 20 above. Gai further discloses wherein the step of associating two or more access control lists with a given filesystem object (see col. 7 lines 16-32) includes storing the two or more access control lists in file storage (see Fig. 4, element 408, NVRAM) with the given filesystem object (see col. 6, lines 1-2 & 13-18; col. 7, 60-66, "ACLs 416a-416e may be downloaded to device 316 ... and stored at NVRAM 408.>").

Regarding Claim 10, Gai and Bradley disclose the limitations of Claims 1 and 20 above. Gai further discloses wherein an access control list storage (see Fig. 4, element 410, TCAM) is provided an for each directory, each filesystem, or for each portion of a file system (see col. 6, lines 24-27, "apportioned segments 410a-e"; col. 6, lines 31-35; col. 9, lines 22-31).

Regarding Claim 11, Gai discloses a filesystem, wherein the file system, (see abstract, "organizing, storing and evaluating access control lists"), and wherein the filesystem includes and a plurality of access mechanisms (see col. 7, lines 24-27, ACE-Access Control Entry) and wherein each access mechanism of the plurality of access mechanisms is associated with a filesystem type (see col. 5, lines 13-21; col. 8, lines 9-15).

Gai does not disclose "the heterogeneous a heterogeneous filesystem and a plurality of differing filesystem types."

However, Bradley explicitly discloses the heterogeneous a heterogeneous filesystem and a plurality of differing filesystem types (Abstract, col. 7, lines 30-40 and col. 18, lines 1-24).

Therefore, it would have been obvious at the time the invention was made to a person having ordinary skill in the art to have incorporated Bradley's invention within Gai to include in the heterogeneous a heterogeneous filesystem and a plurality of differing filesystem types. One of ordinary skill in the art would have been motivated to do this because there is a need for a file system that can efficiently grant access to heterogeneous platform (Bradley col. 3, lines 9-10).

Gai and Bradley disclose the limitations of Claims 1 and 20 above. Gai and Bradley further disclose a file storage (see Fig. 4, element 408), wherein the file storage has stored therein at least one filesystem object (see col. 7, lines 29-32) and wherein a given filesystem object within the at least one. filesystem object has



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associated therewith two or more access control lists (see Fig. 4, elements 416a-e; col. 6, lines 15-18); wherein the filesystem, responsive to receiving from a requester a request for an access control list associated with the given filesystem object (see col. 4, lines 26-32; col. 7, lines 24-32), determines a filesystem type of the requester (see col. 5, lines 13-21; col. 7, lines 29-34; col. 8, lines 9-15) and returns an access control list from the two or more access control list for the given filesystem object matching the filesystem type of the requestor (see Gai col. 8, lines 14-15, "Once a match is located, the corresponding action is returned and processing stops") and (see Bradley Figures 7 and 9, col. 18, lines 1-25).

4. Claims 4-7, 9, 14-17 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gai and Bradley and further in view of Hitz et al. (U. S. Patent No. 6,457,130) hereinafter Hitz.

Regarding Claims 4 and 14, Gai discloses further comprising: responsive to a determination that a matching access control list does not exist (see col. 8, lines 24-26; col. 7, lines 24-27, "If no ACE of the subject ACL matches the message, an implicit action located at the end of the ACL is typically returned"),

Gai and Bradley do not disclose "providing a new access control list for the filesystem type of the requestor; and returning the new access control list."

However, Hitz explicitly discloses responsive to a determination that a matching access control list does not exist (see col. 6, lines 1-2), providing a new access control

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list for the filesystem type of the requester (see col. 8, lines 26-34, new access control limits); and returning the new access control list (see col. 8, lines 12-16; col. 8, lines 35-40; col. 8, lines 60-62).

Therefore, it would have been obvious at the time the invention was made to a person having ordinary skill in the art to have combined Hitz's invention within Gai and Bradley to include the step of providing a new access control list for the filesystem type when a matching access control list does not exist of the requester and returning the new ACL. One of ordinary skill in the art would have been motivated for the purpose of enforcing file access control among client devices using multiple diverse access control models and multiple diverse file server protocols (see Hitz col. 2, lines 36-40).

Regarding Claims 5 and 15, Hitz discloses wherein the step of returning the new access control list (see col. 8, lines 12-16; col. 8, lines 12-16; col. 8, lines 35-40; col. 8, lines 60-62) includes accessing the new access control list (see col. 8, lines 26-29; "When the file has its access control limits modified") using an access mechanism associated with the filesystem type of the requester (see col. 4, lines 8-11 & lines 43-56, ACE-access control entries).

Regarding Claims 6 and 16, Hitz discloses wherein the step of providing a new access control list for the filesystem type of the requestor (see col. 8, lines 26-34, new access control limits) includes translating an existing access control list to the filesystem type of the requester (see col. 6, lines 1-10).

Regarding Claims 7 and 17, Hitz discloses wherein the step of providing a new access control list for the filesystem type of the requester (see col. 8, lines 26-34, new access control limits) includes providing a default access control list for the filesystem type of the requester based on rules associated with the filesystem (see col. 6, lines 10-13).

Regarding Claims 9 and 19, Gai discloses wherein the step of associating two or more access control lists with a given filesystem object (see Gai col. 7 lines 16-32).

Gai and Bradley do not disclose storing a native access control list in file storage with the given filesystem object and storing one or more non-native access control lists in access control list storage separate from the file storage.

However, Hitz discloses storing a native access control list (see col. 4, lines 8-11, "NT ACL") in file storage (see Fig. 1, element 112; col. 4, lines 43-48, NT security style) with the given filesystem object and storing one non-native access control list (see col. 4, lines 8-11, "Unix Perms") in access control list storage separate from the file storage (see col. 4, lines 8-25, Unix security style).

Therefore, it would have been obvious at the time the invention was made to a person having ordinary skill in the art to have combined Hitz's invention within Gai and Bradley to include the native and non-native access control list stored separately. One of ordinary skill in the art would have been motivated for the purpose of enforcing file

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access control among client devices using multiple diverse access control models and multiple diverse file server protocols (see Hitz col. 2, lines 36-40).

### ***Conclusion***

5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

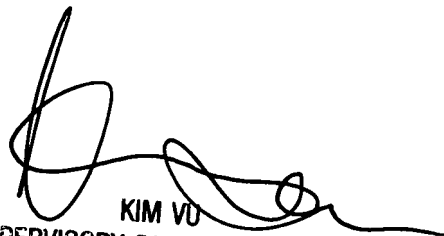
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Bao Tran N. To whose telephone number is 571-272-8156. The examiner can normally be reached on Monday-Friday from 8:00 to 4:30.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kim Y. Vu can be reached on 571-272-3859. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

BT  
05/25/2007

  
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